

Application No.: 10/715,121

PROPOSED EXAMINER'S AMENDMENT

Listing of Claims:

1. (Currently Amended) A method of changing a client program corresponding to a computer, comprising the steps of:
 - transmitting an access request from the client program to a server program;
 - when an error occurs, analyzing a cause of the error, wherein said step of analyzing a cause of the error is made by analyzing contents of a message received from said server program when the error occurs;
 - detecting a change part of a Web Services Description Language (WSDL) WSDL file defining an interface of said server program when the error is analyzed to be caused by change of the WSDL file defining said interface of said server program in the analyzing step;
 - deciding a change portion and a changing scheme of said client program related to said change of said WSDL file defining said interface to change said client program;
 - dynamically replacing the client program being currently operated and which transmitted the request in which the error occurred with a changed client program, wherein the client program is changed by at least the following sub-steps:
 - a) taking said revised WSDL file in source codes of said client program;
 - b) correcting source code portion of said client program related to said detected change part of the WSDL file defining said interface; and
 - c) using said corrected source code portion to prepare an executable client program; and
 - re-transmitting the access request to the server program from the said changed client program.

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2. (Cancelled)

3. (Previously Presented) A client program changing method according to claim 1, wherein

said detection of said change part of the WSDL file defining said interface is made by comparing an unrevised WSDL file with a revised WSDL file.

4. (Original) A client program changing method according to claim 3, wherein said decision of said change portion and said changing scheme of said client program is made on the basis of a comparison result of said WSDL files.

5. (Cancelled)

6. (Currently Amended) A method of changing an interface between a client program and a server program in a client/server system, comprising the steps of:

changing said interface defined by a Web Services Description Language (WSDL) ~~WSDL~~ file due to a revision of a server program in a server system;

registering a changed interface in a location accessible from a client system;

causing a computer in the client system to perform the following operation including the steps of:

transmitting an access request to the server program and, when an error occurs, analyzing a cause of the error, wherein said analyzing a cause of the error is made by analyzing contents of a message received from said server program when the error occurs;

deciding a change part of said interface of the server program when the error is caused by change of a WSDL file defining said interface of the server program;

deciding a change portion and a changing scheme of the client program related to the change of said WSDL file to change said client program; and

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~~replacing the client program being currently operated with a changed client program;~~

dynamically replacing the client program being currently operated and which transmitted the request in which the error occurred with a changed client program, wherein the client program is changed by at least the following sub-steps:

a) taking said revised WSDL file in source codes of said client program;

b) correcting source code portion of said client program related to said detected change part of the WSDL file defining said interface; and

c) using said corrected source code portion to prepare an executable client program; and

re-transmitting the access request to the server program from the said changed client program.

7. (Currently Amended) ~~A client program management apparatus, comprising: A computer program storage media containing instructions for execution by a processor, wherein the instructions comprise:~~

~~error detection means for, when a client program transmits an access request to a server program and an error occurs, analyzing a cause of the error in response to a notification from the client program, wherein said analyzing a cause of the error is made by analyzing contents of a message received from said server program when the error occurs;~~

~~error occurrence portion detection means responsive to a notification from said error detection means for detecting a change part of a Web Services Description Language (WSDL) WSDL file defining an interface of said server program when the error is caused by change of the WSDL file defining said interface of said server program;~~

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changed client program producing means responsive to a notification from said error occurrence portion detection means for deciding a change portion and a changing scheme of said client program related to the change of the WSDL file defining said interface to produce a changed client program; and

client program execution means responsive to a notification from said changed client program producing means for ~~replacing the client program being currently operated with said changed client program.~~ dynamically replacing the client program being currently operated and which transmitted the request in which the error occurred with a changed client program, wherein the client program is changed by at least the following sub-steps:

a) taking said revised WSDL file in source codes of said client program;

b) correcting source code portion of said client program related to said detected change part of the WSDL file defining said interface; and

c) using said corrected source code portion to prepare an executable client program; and

re-transmitting the access request to the server program from the said changed client program.

8. (Currently Amended) A computer program storage media containing instructions for execution by a processor, wherein the instructions include a client program management program group comprising:

an error detection program for, when a client program transmits an access request to a corresponding server program and an error occurs, analyzing a cause of the error in response to a notification from the client program, wherein said analyzing a cause of the error is made by analyzing contents of a message received from said server program when the error occurs;

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an error occurrence portion detection program responsive to a notification from said error detection program for detecting a change part of a Web Services Description Language (WSDL) ~~WSDL~~ file defining an interface of said server program when the error is caused by change of said interface of said server program;

a changed client program producing program responsive to a notification from said error occurrence portion detection program for deciding a change portion and a changing scheme of said client program related to the change of said interface to produce a changed client program; and

a client program execution program responsive to a notification from said changed client program producing program for ~~replacing the client program being currently operated with said changed client program.~~ dynamically replacing the client program being currently operated and which transmitted the request in which the error occurred with a changed client program, wherein the client program is changed by at least the following sub-steps:

a) taking said revised WSDL file in source codes of said client program;

b) correcting source code portion of said client program related to said detected change part of the WSDL file defining said interface; and

c) using said corrected source code portion to prepare an executable client program; and

re-transmitting the access request to the server program from the said changed client program.

9. (Currently Amended) A client/server system comprising:

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a server computer including a first computer program storage media containing instructions for execution by a first processor, wherein the instructions include a server program comprising;

a registry for storing information related to an interface of said server program; and

a client computer including a second computer program storage media containing instructions for execution by a processor, wherein the instructions include:

a client program corresponding to the server program;

an error detection program for, when said client program transmits an access request to said server program and an error occurs, analyzing a cause of the error in response to a notification from said client program, wherein said analyzing a cause of the error is made by analyzing contents of a message received from said server program when the error occurs;

an error occurrence portion detection program responsive to a notification from said error detection program for accessing to said registry to detect a change part of a Web Services Description Language (WSDL) WSDL file defining an interface of said server program when the error is caused by change of the WSDL file defining said interface of said server program;

a changed client program producing program responsive to a notification from said error occurrence portion detection program for deciding a change portion and a changing scheme of said client program related to the change of the WSDL file defining said interface to produce a changed client program; and

a client program execution program responsive to a notification from said changed client program producing program for ~~replacing the client program being currently operated with said changed client program.~~ dynamically replacing the client program being

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currently operated and which transmitted the request in which the error occurred with a changed client program, wherein the client program is changed by at least the following sub-steps:

a) taking said revised WSDL file in source codes of said client program;

b) correcting source code portion of said client program related to said detected change part of the WSDL file defining said interface; and

c) using said corrected source code portion to prepare an executable client program; and

re-transmitting the access request to the server program from the said changed client program.

10. (Currently Amended) A client/server system according to claim 9, wherein said registry is a Universal Description Discovery and Integration (UDDI) ~~UDDI~~ registry.